



Metro Nashville
DISTRICT ENERGY SYSTEM

Customers Meeting

October 20, 2005



Agenda

1. Welcome and Introductions
2. Operations and Monitoring Activities
3. Natural Gas Purchasing Review
4. Financial Review
5. Capital Projects/EDS Repair/Improvements
6. Q&A
7. Handouts
8. Other Topics by Attendees
9. Adjourn



1. Welcome and Introductions

- DES Advisory Board
 - Executive Order No. 20 (See Handout)
- Metro Team
- Constellation Team



2. Operations and Monitoring Activities

- End of Fiscal Year Performance Review
- CEPS FY05 Annual Report (See Handout)

Trends in FY 2005

- Weather
 - Heating season – warmer than normal; cooler than last year
 - Cooling season - cooler than normal; cooler than last year
- Steam sales - down from last year
- Chilled Water Sales – down from last year
- Electric use – trending down (due to lower sales)
- Natural gas use – trending down (due to lower sales)
- Steam production efficiency – trending down (due to low condensate return)
- Chilled Water production efficiency – no change
- EDS thermal losses – both Steam and Chilled Water lower than last year

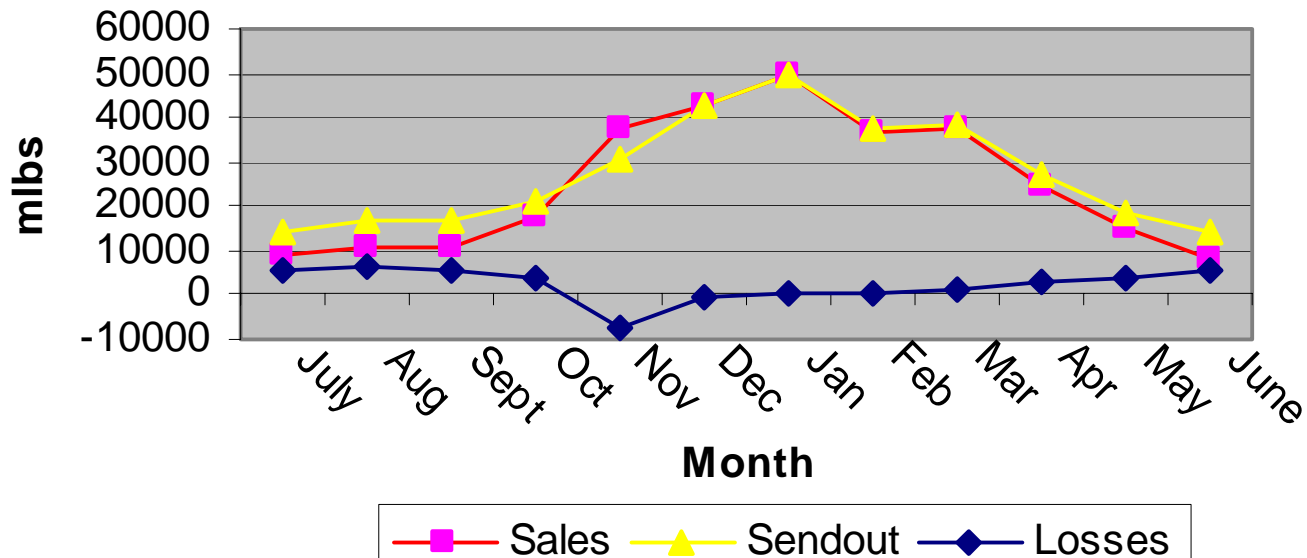


Operations

Steam Sales and Sendout –FY 2005

Sales **302,899 mlbs**

Sendout **327,618 mlbs**

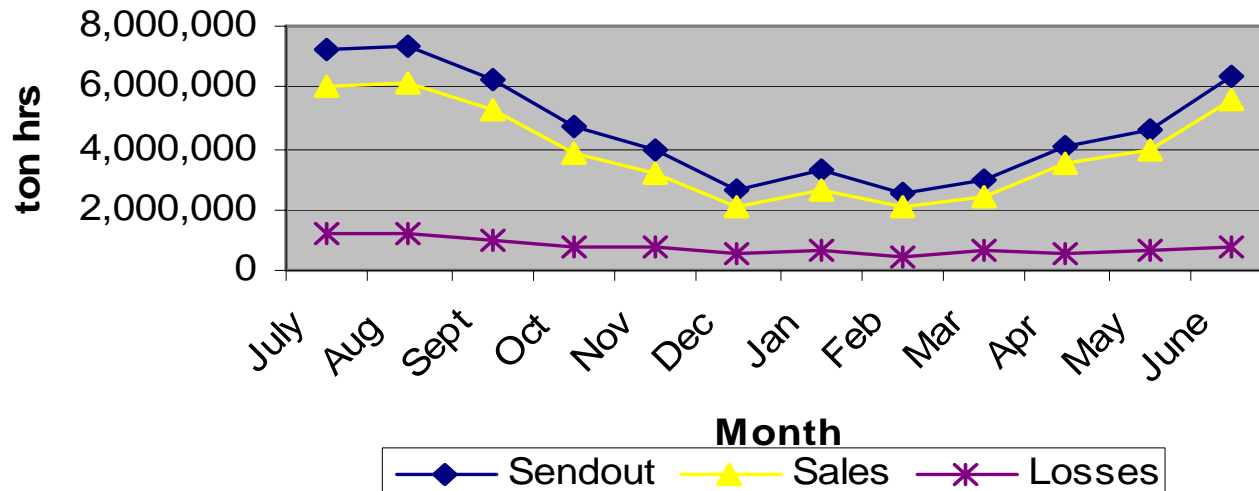




Operations

Chilled Water Sales, Sendout, and Losses – FY 2005

Sales	46,846,558 tonhrs	Sendout	55,907,100 tonhrs
Losses	9,060,542 tonhrs		



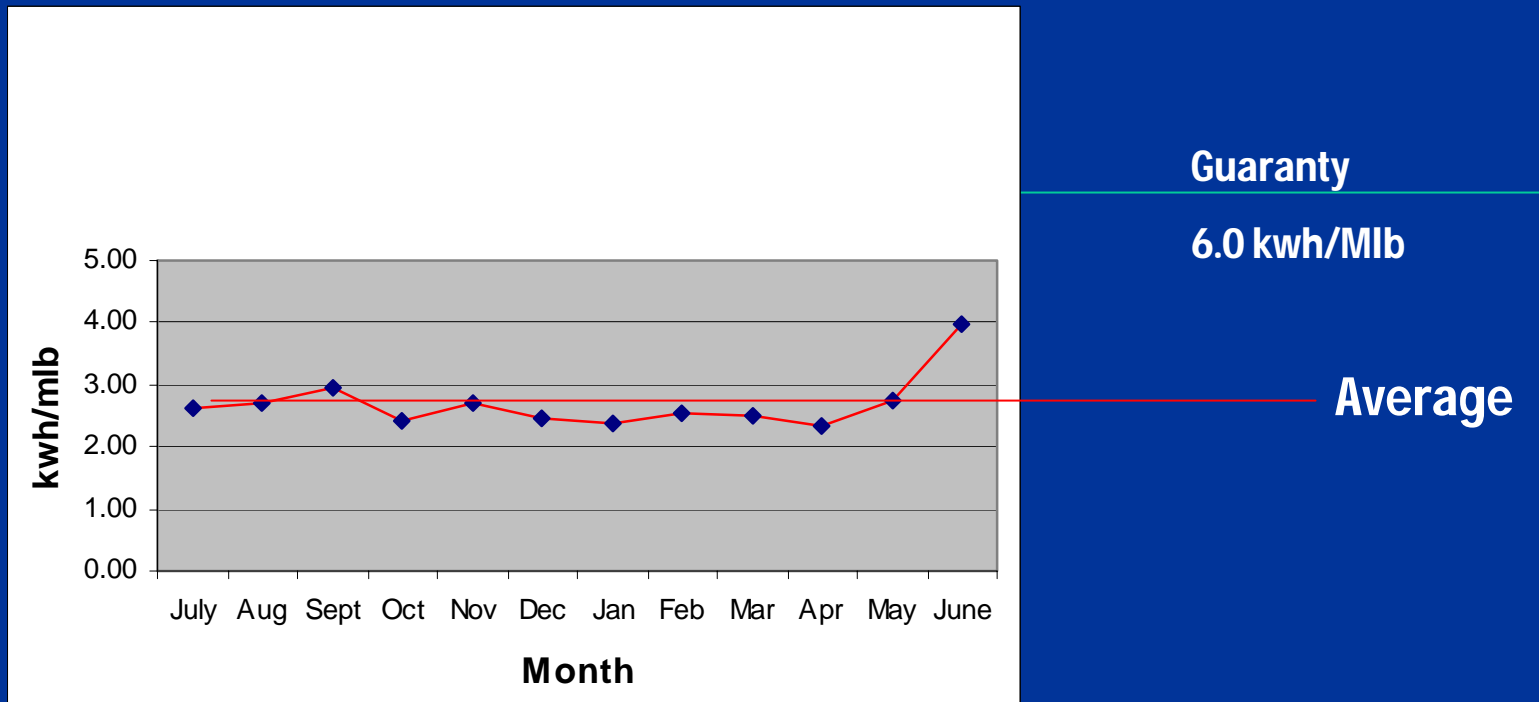


Performance Measurement

Electricity used for Steam Sendout– FY 2005

Average

2.84 kwh/MLb

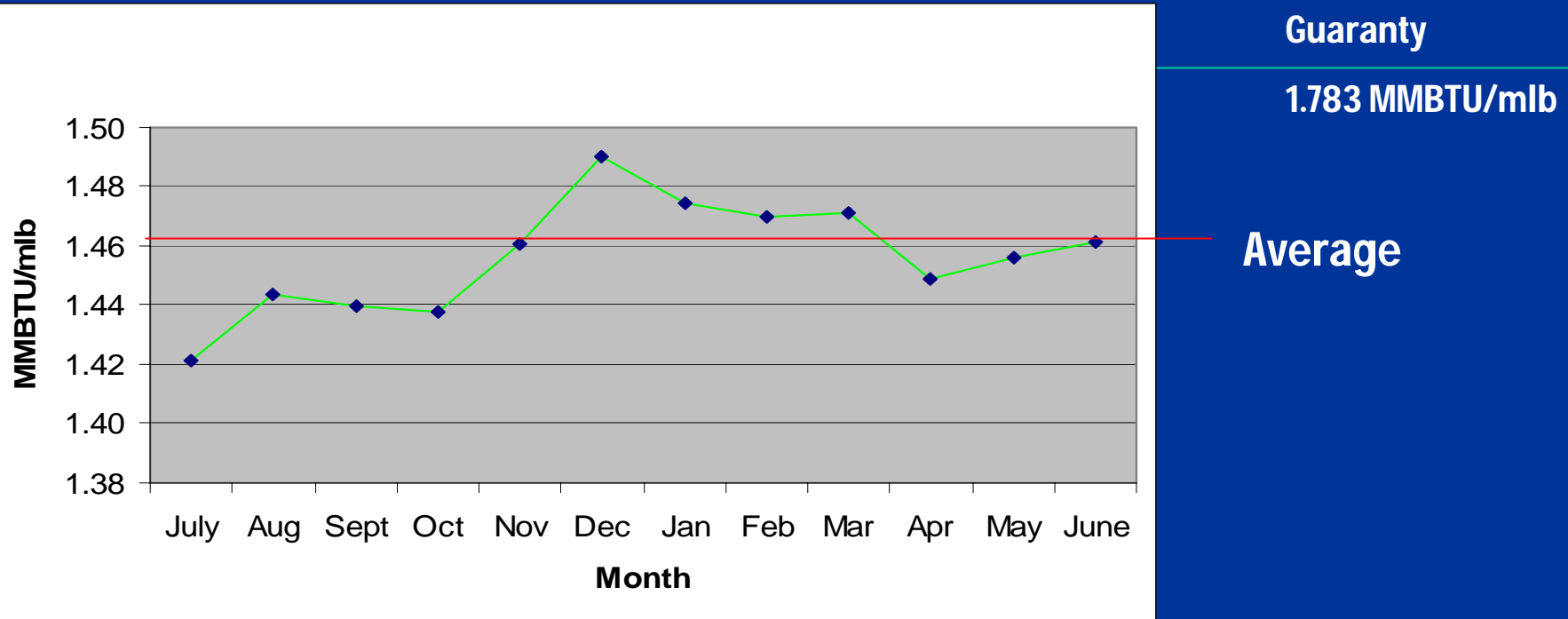




Performance Measurement

Fuel used for Steam Sendout – FY 2005

Average this year – 1.46 MMBTU/mlb

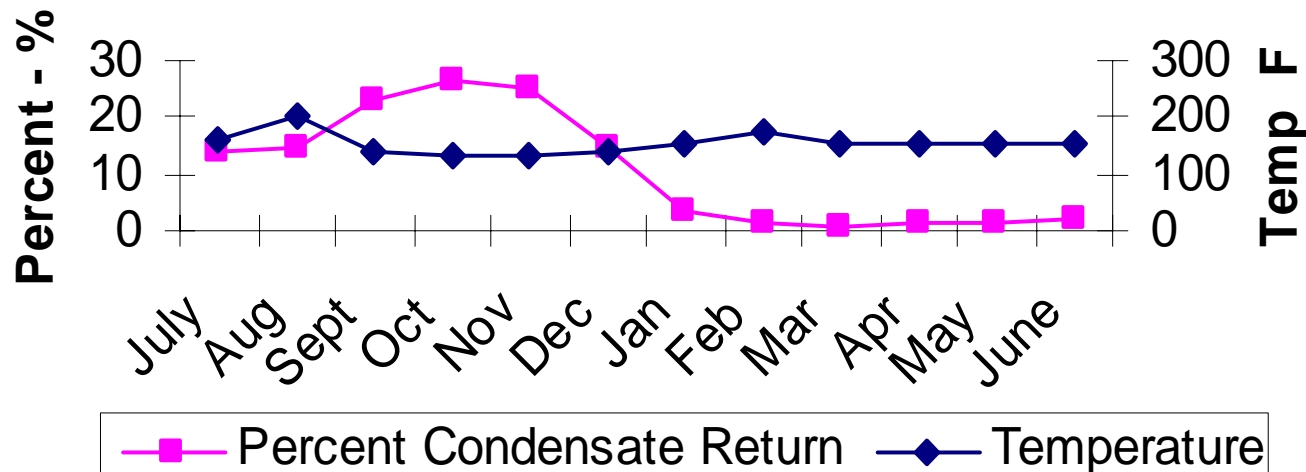




Performance Measurement

Condensate Return – FY 2005

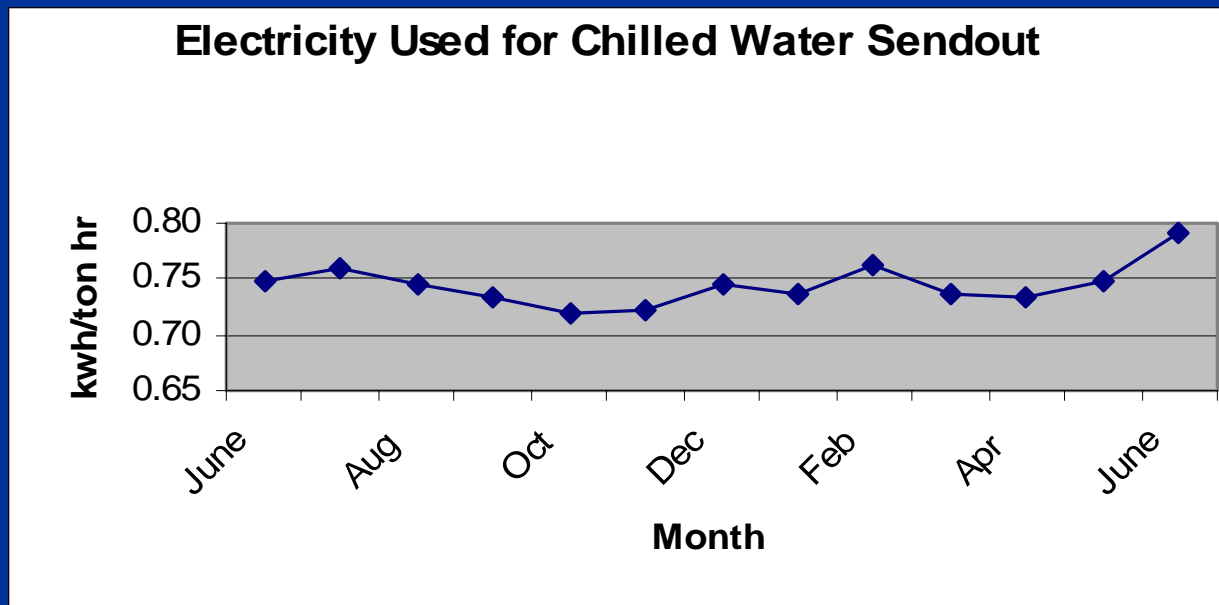
Total this year 31,215,485 lbs





Performance Measurement

Electricity used for Chilled Water Sendout - FY 2005
Average this year 0.75 kwh/ton hr



Guaranty

1.055 kwh/ton hr sold

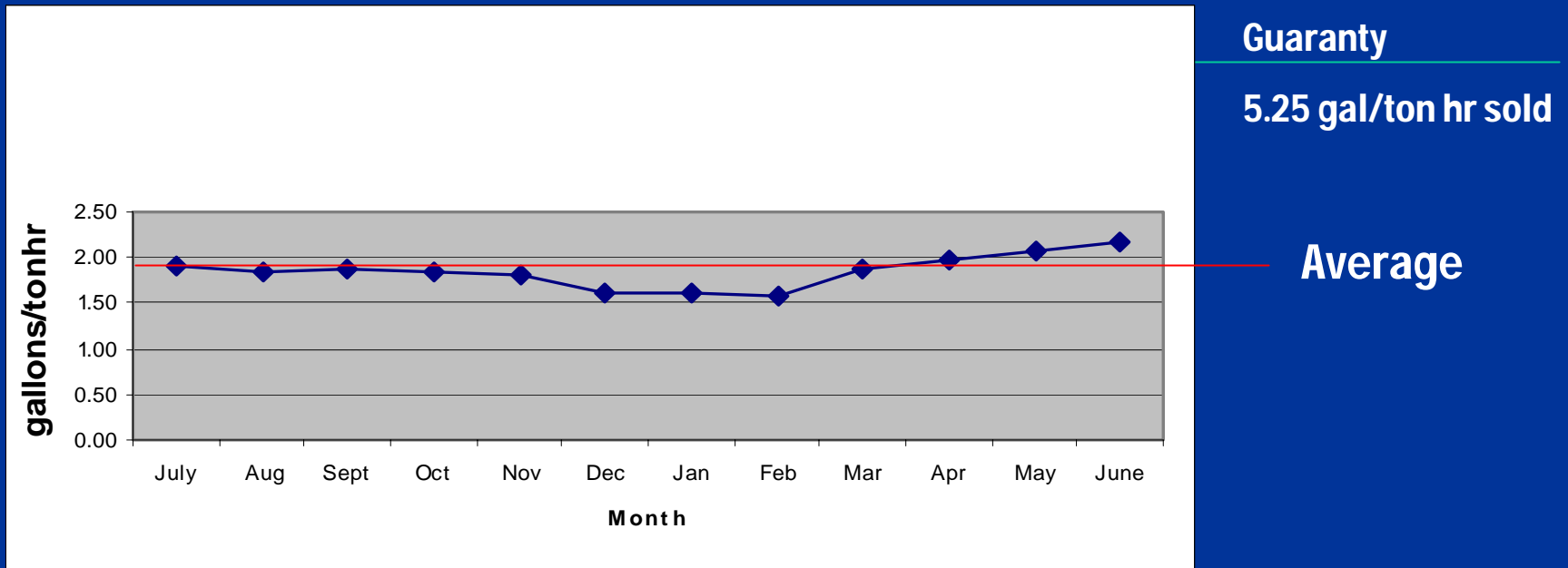
Average



Performance Measurement

Chilled Water Makeup Water Use – through end of 4th Quarter FY 2005

Average this year 1.89 gal/tonhr



Maintenance

- “IMAIN” automated PM program manages equipment service work
- Boilers have been inspected and ready for heating season
- Plant is in excellent condition with no unusual maintenance required



Facility and Grounds



Monthly Inspection Process

- Operating Equipment
- Housekeeping
- Maintenance work in process
- Building Structure
- Safety Equipment
- Instrumentation and controls
- Building exterior and grounds
- Document with digital photos



The EGF Looks Great!





3. Natural Gas Purchasing Review

- Table 3A - FY2005 Gas Spending v. FY2006 Budget
- Hurricane Impacts
- Revisions to Gas Costs Projections
- Table 3B - Projected Gas Costs for FY2006



Table 3A - FY2005 Gas Spending v.
FY2006 Budget

FY05 Actual					
Steam Sold	Steam Out*	Deca-therms	Price per Dt	Dt per mlb out	Gas Cost All-in
302,999	327,615	478,925	\$7.981	1.462	\$3,583,002
FY06 Budget					
332,361	365,597	557,315	\$9.90	1.5791	\$5,712,967



Hurricanes Disrupted Gulf Production and Transport

- 246 Billion cubic feet (“Bcf”) production shut-in during Aug 26-Oct 7 period
- 6.4 Bcf/day, or 64% daily production, still shut-in at Oct 7
- Tennessee Gas Pipeline (“TGP”) supply loss estimated at 1.5 Bcf/d early October
 - 800 Leg supply currently curtailed approximately 15%
 - 500 Leg supply currently curtailed approximately 100%



DES and Atmos Energy Minimized Disruption Effects

- DES ensured propane equipment operational; monitored economics of natural gas v. propane
- Atmos acquisitions minimized problems:
 - September: replaced gas supplies in daily market to avoid gas curtailments and minimize any imbalance penalties from the Nashville Gas
 - October: got supplies on alternate pipeline - improved reliability; avoided TGP curtailments
- Estimated force majeure cost to DES of August – October supply disruptions – \$22,900



Actual Shut-Ins and Future Uncertainty Dramatically Increased Gas Prices

- Current average NYMEX future price for Winter 05-06 is \$13.99; 69% higher than price used in DES FY06 budget
- NYMEX Winter price increased 34% since the week before Hurricane Katrina
- Nashville Gas sales rate increased about \$4/MMBtu effective Oct 1st
(DES receives only transport service from NGC)



DES' Price Risk Management Minimized Impact on FY06 Gas Costs

- DES has “locked” prices for about 80% of estimated remaining FY06 consumption
- Fixing, or “locking”, prices for future periods minimizes total price effects of singular, dramatic price events
- Locked prices reduced DES' estimated FY06 gas costs \$1.7 MM below NYMEX
- At current forward traded prices for un-hedged gas, total FY06 costs are projected at \$5.4 million - still below the FY06 budget of \$5.7 million (see Table 3B)



Table 3B - Projected Gas Costs for FY2006

	Actual - New Projected Consumption DT	Locked Price Costs			Market Price Costs			TOTAL COST OF SERVICE (Including Contingencies)	Unit Cost
		Total Locked Quantity	All-In Delivered Locked Price	Cost of Locked Price Quantities	Consumption Not Hedged	All-In Delivered Market Price	Cost of Market Price Quantities		
Jul-05	18,071	15,300	\$8.585	\$131,355	2,771	\$7.856	\$21,770	\$153,125	\$8.47
Aug-05	19,100	17,000	\$8.608	\$146,344	2,100	\$10.390	\$21,820	\$168,164	\$8.80
Sep-05	20,741	17,700	\$8.964	\$158,671	3,041	\$13.194	\$40,123	\$198,794	\$9.58
Oct-05	26,815	23,100	\$9.004	\$207,997	3,715	\$15.165	\$56,339	\$285,365	\$10.64
Nov-05	45,662	32,000	\$8.598	\$275,128	13,662	\$14.369	\$196,306	\$515,389	\$11.29
Dec-05	67,214	47,000	\$8.566	\$402,623	20,214	\$14.806	\$299,297	\$768,865	\$11.44
Jan-06	79,565	55,700	\$8.578	\$477,776	23,865	\$15.223	\$363,289	\$922,589	\$11.60
Feb-06	65,586	47,800	\$8.553	\$408,853	17,786	\$15.073	\$268,096	\$742,078	\$11.31
Mar-06	55,883	39,100	\$8.590	\$335,887	16,783	\$14.633	\$245,593	\$636,405	\$11.39
Apr-06	39,700	27,900	\$8.513	\$237,511	11,800	\$11.508	\$135,794	\$403,663	\$10.17
May-06	28,941	20,300	\$8.607	\$174,716	8,641	\$11.104	\$95,947	\$291,924	\$10.09
<u>Jun-06</u>	<u>22,448</u>	<u>0</u>	<u>NA</u>	<u>\$0</u>	<u>22,448</u>	<u>\$11.150</u>	<u>\$250,304</u>	<u>\$274,872</u>	<u>\$12.24</u>
Total	489,726	342,900	\$8.623	\$2,956,861	146,826	\$13.585	\$1,994,677	\$5,361,234	\$10.95



4. Financial Review

- Table 4A - FY05 Financial Results
- Table 4B - FY05 True-Up
- Table 4C - Reallocation of Water & Chemicals Charges



4. Financial Review

Table 4A - FY 2005 Budget v. Spending

Item	FY05 Budget	FY05 Spending	Over (Under)	% of Budget
FOC - Basic	\$3,449,395	\$3,449,395	\$0	100.00%
9th Chiller	\$32,321	\$32,321	\$0	100.00%
C/O 6A	\$0	\$63,812	\$63,812	
Chemicals	\$76,050	\$115,886	\$39,836	152.38%
Engineering	\$50,700	\$14,000	(\$36,700)	27.61%
Insurance	\$28,000	\$30,759	\$2,759	109.85%
Marketing - CES	\$48,297	\$48,297	\$0	100.00%
- Metro		\$26,782	\$26,782	
Metro Incremental Cost	\$405,600	\$635,230	\$229,630	156.61%
EDS Electric		\$58,075	\$58,075	
Water and Sewer	\$1,022,744	\$471,179	-\$551,565	46.07%
Natural Gas	\$4,688,928	\$3,583,002	-\$1,105,926	76.41%
Electricity	\$3,434,833	\$2,806,058	-\$628,775	81.69%
EDS Repair & Improvement	\$152,100	\$42,653	-\$109,447	20.04%
EDS Surcharge	\$60,739		-\$60,739	
FEA Steam		\$129,093	\$129,093	
CHW		\$60,531	\$60,531	
Subtotal - Operations	\$13,449,707	\$11,567,073	-\$1,882,634	86.00%
Debt Service 2002 Bonds	\$4,245,055	\$4,245,055	\$0	100.00%
Oper. Reserve Funding Deposit	\$899,356	\$899,356	\$0	100.00%
Contingency	\$48,182			
Total	\$18,642,300	\$16,711,484	-\$1,930,816	89.64%



Table 4B – True-up of FY2005 Charges

Adjustment	FY05 Budget Line Items						
	FOC	Engineering	Metro Incremental Cost	Water/ Sewer	Natural Gas	Electricity	Chemicals
1 C/O 6A Underpayment - 4 months	\$26,588						
2 Engineering Accruals Overpayment		(\$36,700)					
3 Metro Incremental Cost Underpayment			\$229,630				
4 CES Fuel Efficiency Adjustment							
a. Electricity for Steam						(\$2,119)	
b. Natural Gas for Steam					\$906		
c. Water for Steam				(\$2,965)			
d. Water for Chilled Water				(\$17,370)			
5 Project Administration Overpayment	(\$126,927)						
6 Chemicals Underpayment							\$15,140
Total Allocable Amount	(\$100,338)	(\$36,700)	\$229,630	(\$20,334)	\$906	(\$2,119)	\$15,140

Total \$86,185



Table 4C - Reallocation of Water & Chemicals Charges

	Amount Originally Billed	Amount to be Allocated to Customers	Net Reductions to Customer Charges
Water for Steam	\$81,485	\$71,447	(\$10,038)
Water for Chilled Water	\$222,570	\$192,147	(\$30,423)
Chemicals for Steam	\$22,609	\$19,652	(\$2,957)
Chemicals for Chilled Water	\$53,497	\$45,910	(\$7,587)
Total	\$380,161	\$329,156	(\$51,005)



5. Capital Projects/EDS Repair/Improvements

- Table 5A – Budget and Status of Capital Projects
- Photographs of EDS Repairs and Improvements Projects as of September 2005



**Table 5A – Capital Projects as of
6/30/05**

	Budget	Spent through 6/30/05	Remaining to Be Spent
2002A Projects			
Birch Building EDS Connection	\$1,802,858	\$1,659,462	\$143,396
Tennessee Towers Decoupling	\$1,360,061	\$169,088	\$1,190,973
Deaderick St. Condensate Repair	\$494,179	\$493,548	\$631
Repair/Replacement			
Steam/cond. line replace MH 18 to L	\$392,040	\$9,100	\$382,940
Library and Archives Cond. Replace.	\$73,783	\$6,383	\$67,400
Parkway Towers Steam Line Replace	\$139,710	\$8,366	\$131,344
Manhole 5 Rehabilitation	\$158,575	\$79,904	\$78,672
2005B Projects			
New Library Connection	\$826,146	402,752	423,574
Symphony Connection	\$2,492,033	2,218,309	273,724
Viridian Connection	\$1,338,085	1,030,855	\$307,230
Renaissance Decoupling	\$708,700	\$41,151	\$667,549
Customer Metering	\$1,586,105	\$160,153	\$1,425,952



Customer Metering Replacements



- Steam meters - 97% complete
- Chilled water meters – 50% complete
– 100% by November 11, 2005
- Metering panels – 75% complete
- Internet connections needed from customers



Metro Public Library Connection



The photographs above show the access shaft to the EDS Tunnel and the chilled water piping installed in the Library's parking garage.



Schermerhorn Symphony Connection



The photographs above show the chilled water and steam lines being installed near the intersection of First Avenue and Molloy Street and the same block viewed from the west instead of from the east.



Manhole 5 Replacement



The photographs above are of M/H 5 before and as the forms are being stripped from the new structure.

6. Q&A



7. Handouts

1. DES Advisory Board – Executive Order No. 20
2. CEPS FY05 Annual Report
3. DES Fall '05 Newsletter
4. Customer Satisfaction Survey



Metro Nashville
DISTRICT ENERGY SYSTEM

8. Other Topics by Attendees

9. Adjourn